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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,752	03/10/2004	Eric W. Kramer	102.117	6430

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Gordon E. Gray III
Suite 233
4401 N. Atlantic Ave.
Long Beach, CA 90807

EXAMINER

NGUYEN, HOA CAO

ART UNIT PAPER NUMBER

2841

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,752

Applicant(s)

KRAMER ET AL.

Examiner

Hoa C. Nguyen

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 9/13/06 has been entered. Applicants have amended claim 3. Claims 1-2 and 4-12 are cancelled and claims 13-16 are newly added. Claims 3 and 13-16 are treated on the merits in this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 3, 13-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatton (US 20030207609) in view of Gossmann (US 6551124).

Regarding claim 3, as shown in figure 4, Hatton discloses an LED module comprising:

(a) A circuit board (the board on left of the figure having attached LEDs, see paragraph 6)) secured to a base 10 (rail section, see paragraph 40) containing at least two electrical leads 26 (wire, see paragraph 46);

(b) the circuit board having an LED (clearly shown in figure 4) and at least two contact teeth 46 (pins, see paragraph 46) whereby each contact tooth makes electrical contact with one of the at least two electrical leads.

However, Hatton fails to disclose a gasket with a thickness covers a side of the circuit board and where the at least two contact teeth traverse the thickness of the gasket to make electrical contact with the at least two electrical leads.

Gossmann, as shown in figure 1, discloses a contact device 2 (col.4:1-26) for flat band cable comprising pins 20 (contact screws), a gasket 6, a base 8 (housing bottom), and cable 10 (ribbon cable having conductors 12). And, as shown in figure 2, Gossmann further discloses that the gasket 6 covered the section that housed the pins 20 where the pins 20 traverse the thickness of the gasket 6 to make electrical contact with the electrical lead 12 (conductors) of the cable 10. The gasket provides a sealing system to protect the contacts between the cable and the contact elements (see col.1:65 continuing col.2:47).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a gasket 6, as taught by Gossmann, with a thickness covers a side of the circuit board where the at least two contact teeth 46 traverse the thickness of the gasket to make electrical contact with the at least two electrical leads 26 in order to provide a sealing system between contacts.

Regarding claim 13, Hatton in view of Gossmann discloses every limitation as show in claim 3 above but fails to disclose the gasket, which comprises vinyl foam tape.

Vinyl foam tape for making gaskets is old and well known in the art. It is merely a matter of choice depending upon particular applications and whether or not a preferred material is widely available in the supplying market.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select vinyl foam tape as a preferred choice of material for the gasket in order to easily obtain from the supplying market. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 14, the limitation that the gasket is attached to the circuit board by pressure sensitive double-sided adhesive is a process limitation in a product claim and is treated in accordance with MPEP 2113. As this process limitation results in a product structure that is the same as the product of Hatton in view of Gossmann, then Hatton and Gossmann anticipate the claim.

Regarding claim 16, Hatton in view of Gossmann disclose every limitation as shown in claims 3 and above but fails to disclose the at least two contact teeth that are each coated in wax.

A coating on a conductive material is old and well known for protecting the material from oxidation, which is known to reduce the surface conductivity of the material.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the contact teeth 46 with wax instead of other

Art Unit: 2841

materials (gold/copper for example) in order to save cost. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatton and Gossman as applied to claim 3 above, and further in view of Bogursky et al. (US 5451174).

Regarding claim 15, Hatton in view of Gossmann discloses every limitation as shown in claim 3 above, but fails to disclose a shoulder mount for each contact tooth.

Bogursky, as shown in figures 9-12, discloses a plurality of surface mounting pins for circuit boards, in which pin 50 (figure 9A, for illustration purpose only) has a shoulder mount 51 (a base) mounted at the base of the pin.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a shoulder mount 51, taught by Bogursky, for each contact tooth in order to reinforce the strength of the pin when penetrating into a wire.

Response to Arguments

6. Applicant's arguments with respect to claim 3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa C. Nguyen whose telephone number is 571-272-8293. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2841

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa C. Nguyen
11/20/06


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER 11/27/06
TECHNOLOGY CENTER 2800